BBA

Protein Structure & Molecular Enzymology

Vol. 1122, 1992

Cumulative Contents

Regular Papers

Purification and electrospray mass spectrometry of aldose reductase from pig lens
J.-M. Reymann, J.-M. Rondeau, P. Barth, M. Jaquinod, A. Van Dorsselaer and J.-F. Biellmann (France) 1

Highly homologous cytochromes *P*-450 and b_5: a model to study protein–protein interactions in a reconstituted monooxygenase system
P. Honkakoski, A. Linnala-Kankkunen, S.A. Usanov and M.A. Lang (Finland, USSR) 6

Close amino acid sequence relationship between the new plasmid-mediated extended-spectrum β-lactamase MEN-1 and chromosomally encoded enzymes of *Klebsiella oxytoca*
M. Barthélémy, J. Péduzzi, H. Bernard, C. Tancrède and R. Labia (France) 15

Characterization of the major phosphofructokinase – dephosphorylating protein phosphatases from *Ascaris suum* muscle
G. Daum, B. Schmid, C. MacKintosh, P. Cohen and H.W. Hofer (Germany, UK) 23

Chemical modification of cyclomaltodextrin glucanotransferase from *Bacillus circulans* var. *alkalophilus*
P. Mattsson, T. Pohjalainen and T. Korpela (Finland) 33

Hydrogen bond network of cytochrome *P*-450$_{cam}$: a network connecting the heme group with helix K
K.-i. Yoshikawa, T. Noguti, M. Tsujimura, H. Koga, T. Yasukochi, T. Horiuchi and M. Gō (Japan) 41

Inhibition of D-3-aminoisobutyrate–pyruvate aminotransferase by 5-fluorouracil and α-fluoro-β-alanine
M. Kaneko, Y. Kontani, M. Kikugawa and N. Tamaki (Japan) 45

EPR and redox properties of *Desulfovibrio vulgaris* Miyazaki hydrogenase: Comparison with the Ni-Fe enzyme from *Desulfovibrio gigas*
M. Asso, B. Guigliarelli, T. Yagi and P. Bertrand (France, Japan) 50

Characterization of aldehyde reductase of *Sporobolomyces salmonicolor*
M. Kataoka, H. Sakai, T. Morikawa, M. Katoh, T. Miyoshi, S. Shimizu and H. Yamada (Japan) 57

Proton nuclear Overhauser effect study of the heme active site structure of *Coprinus Macrorhizus* peroxidase
L.B. Dugad and H.M. Goff (USA) 63

Biochemical and physiological studies on two T-kininogen species using monoclonal antibodies
J. Bouhnik, T. Baussant, F. Savoie and S. Lesage (France) 70

Overproduction, purification and characterization of SecD and SecF, integral membrane components of the protein translocation machinery of *Escherichia coli*
S.-i. Matsuyama, Y. Fujita, K. Sagara and S. Mizushima (Japan) 77

Purification, characterization and preliminary X-ray study of fumarase from *Saccharomyces cerevisiae*
J.S. Keruchenko, I.D. Keruchenko, K.L. Gladilin, V.N. Zaitsev and N.Y. Chirgadze (Russia) 85

Proteolytic processing of human lysosomal arylsulfatase A
T. Fujii, T. Kobayashi, K. Honke, S. Gasa, M. Ishikawa, T. Shimizu and A. Makita (Japan) 93

Unfolding and trypsin inactivation studies reveal a conformation drift of glucose-6-phosphate dehydrogenase upon binding of NADP
J.M. Bautista, J.M. Fuentes, A. Diez, C. Gutiérrez-Merino and G. Soler (Spain) 99

Characterisation of a tryptic peptide from human placental ribonuclease inhibitor which inhibits ribonuclease activity
I. Crevel-Thieffry, S. Cotterill and E. Schuller (France, UK) 107

Regular Papers

Polytungstate binding to metmyoglobin: an access to various structural forms of the protein
G. Chottard, N. El Ajouz and G. Herve (France) 113

Identification of a novel β-turn-rich repeat motif in the D hordeins of barley
N.G. Halford, A.S. Tatham, E. Sui, L. Daroda, T. Dreyer and P.R. Shewry (UK, Denmark) 118

Isolation of the phosphatidylinositol 4-monophosphate dissociable high-affinity profilin-actin complex
Y. Katakami, N. Katakami, P.A. Janmey, J.H. Hartwig and T.P. Stossel (USA) 123

Myohemerythrin from the sipunculid, *Phascolopsis gouldii*: purification, properties and amino acid sequence
R.C. Long, J.-H. Zhang, D.M. Kurtz Jr., A. Negri, G. Tedeschi and F. Bonomi (USA, Italy) 136

Lipases from different sources vary widely in dependence of catalytic activity on water activity
R.H. Valivety, P.J. Halling, A.D. Peilow and A.R. Macrae (UK) 143

Kinetics of dipeptidyl peptidase IV proteolysis of growth hormone-releasing factor and analogs
J. Bongers, T. Lambros, M. Ahmad and E.P. Heimer (USA) 147

Regulation of the G_{M1}-galactosidase supramolecular structure and catalytic activity in vitro
A.V. Pshezhetsky, A.V. Levashov and G.Y. Wiederschain (Russia) 154

X-ray diffraction studies on human tendon show age-related changes in collagen packing
M.D. Naresh and B. Brodsky (USA) 161

Histone H1a subtype presents structural differences compared to other histone H1 subtypes. Evidence for a specific motif in the C-terminal domain
H. Baubichon-Cortay, L. Mallet, L. Denoroy and B. Roux (France) 167

Inhibition of xanthine oxidase by uric acid and its influence on superoxide radical production
R. Radi, S. Tan, E. Prodanov, R.A. Evans and D.A. Parks (Uruguay, USA) 178

Enzymatic methylation of heterogeneous nuclear ribonucleoprotein in isolated liver nuclei
R. Rajpurohit, W.K. Paik and S. Kim (USA) 183

A variety of catalases and bromoperoxidases in genus *Pseudomonas* and their characterization
N. Itoh, N. Morinaga and A. Nomura (Japan) 189

Conformational studies of the 'RGD' containing peptide echistatin and close analogs by circular dichroism and fluorescence
C. Brockel, D.J. Cowley and J.T. Pelton (France) 196

Purification and characterization of major glycoproteins, PAS-6 and PAS-7, from bovine milk fat globule membrane
D.H. Kim, C. Kanno and Y. Mizokami (Japan) 203

Identification of the histidine residue in *Escherichia coli* isocitrate lyase that reacts with diethylpyrocarbonate
J. Rua, A.G.S. Robertson and H.G. Nimmo (UK) 212

Partial purification and characterization of membrane-associated diacylglycerol kinase of *Drosophila* heads
H. Inoue, T. Yoshioka and Y. Hotta (Japan) 219

Regular Papers

Identification of a putative collagen-binding protein from chicken skeletal muscle as glycogen phosphorylase
D.J. Law and J.G. Tidball (USA) 225

Denaturation of glucose-6-phosphate dehydrogenase from *Leuconostoc mesenteroides* by guanidine hydrochloride; identification of inactive, partially unfolded, dimeric intermediates
J.J. Plomer and A. Gafni (USA) 234

Proteolytic modification of raw-starch-digesting amylase from *Bacillus circulans* F-2 with subtilisin: separation of the substrate-hydrolytic domain and the raw substrate-adsorbable domain
C.-H. Kim, S.-T. Kwon, H. Taniguchi and D.-S. Lee (South Korea, Japan) 243

Structural analysis of the interaction between the side-chain of substrates and the active site of lanosterol 14α-demethylase ($P\text{-}450_{14DM}$) of yeast
Y. Aoyama, Y. Yoshida, Y. Sonoda and Y. Sato (Japan) 251

Localization and characterization of hemoglobin-degrading aspartic proteinases from the malarial parasite *Plasmodium falciparum*
D.L. Vander Jagt, L.A. Hunsaker, N.M. Campos and J.V. Scaletti (USA) 256

Investigation of the active site of human placenta glutathione transferase π by means of a spin-labelled glutathione analogue
A.M. Caccuri, F. Polizio, F. Piemonte, P. Tagliatesta, G. Federici and A. Desideri (Italy) 265

Study of the structure of arrestin (S-antigen) from bovine photoreceptors by FTIR spectroscopy
D. Garcia-Quintana, P. Garriga and J. Manyosa (Spain) 269

NADPH activates a decarboxylation reaction catalysed by lamb liver 6-phosphogluconate dehydrogenase
S. Hanau, F. Dallocchio and M. Rippa (Italy) 273

Interaction of catalytic-site mutants of *Bacillus subtilis* α-amylase with substrates and acarbose
K. Takase (Japan) 278

A heat-stable serine proteinase from the extreme thermophilic archaebacterium *Sulfolobus solfataricus*
N. Burlini, P. Magnani, A. Villa, F. Macchi, P. Tortora and A. Guerritore (Italy) 283

Conversion of non-functional to functional iron following reconstitution of hemerythrin
J.-H. Zhang, D.M. Kurtz, Jr., Y.-M. Xia and P.G. Debrunner (USA) 293

Effect of NaCl addition on nanosecond O_2 escaping reaction of myoglobin: evidences for the transition of myoglobin dynamic structure at 20°C
F. Sato, Y. Sakaguchi, H. Hayashi, T. Iizuka and Y. Shiro (Japan) 299

Hydrophobic interaction of lysozyme and α-lactalbumin from equine milk whey
P. Haezebrouck, W. Noppe, H. Van Dael and I. Hanssens (Belgium) 305

Adenosine deaminase from *Saccharomyces cerevisiae*: kinetics and interaction with transition and ground state inhibitors
G. Lupidi, F. Marmocchi, M. Falasca, G. Venardi, G. Cristalli, M. Grifantini, E. Whitehead and F. Riva (Italy) 311

Promotion of β-structure by interaction of diabetes associated polypeptide (amylin) with phosphatidylcholine
L.R. McLean and A. Balasubramaniam (USA) 317

Proton transfer roles of lysine 64 and glutamic acid 64 replacing histidine 64 in the active site of human carbonic anhydrase II
C. Engstrand, C. Forsman, Z. Liang and S. Lindskog (Sweden) 321

Limited proteolysis of chicken gizzard 5'-nucleotidase
U. Stochaj, M. Cramer and H.G. Mannherz (Germany) 327

Cumulative Contents, Vol. 1122 333

Author Index 336